FINAL DRAFT/PROPOSED CAAPP PERMIT
Caterpillar, Inc. – Mapleton Foundry
I.D. No.: 143805AAB
Application No.: 96020004
October 8, 2003

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

Caterpillar, Inc. – Mapleton Foundry
Attn: Environmental Coordinator
8826 West Route 24
Mapleton, Illinois 61547-9784

Application No.: 96020004 I.D. No.: 143805AAB
Applicant's Designation: Date Received: February 2, 1996
Operation of: Iron Foundry
Date Issued: TO BE DETERMINED Expiration Date[2]: DATE
Source Location: 8826 West Route 24, Mapleton, Peoria County
Responsible Official: E. L. Gramme, General Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a iron foundry, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact David Hulskotter at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DWH:jar

cc: Illinois EPA, FOS, Region 2
CES
Lotus Notes

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 – federal PSD and 35 IAC Part 203 – Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

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# 1.0 SOURCE IDENTIFICATION

## 1.1 Source

Caterpillar, Inc. – Mapleton Foundry
8826 West Route 24
Mapleton, Illinois 61547-9784
309/633-8636

I.D. No.: 143805AAB
Standard Industrial Classification: 3321, Gray and Ductile Iron Foundries

## 1.2 Owner/Parent Company

Caterpillar, Inc.
100 Northeast Adams Street
Peoria, Illinois 61602

## 1.3 Operator

Caterpillar, Inc.
8826 West Route 24
Mapleton, Illinois 61547-9784

Staff Environmental Engineer
309/633-8730

## 1.4 General Source Description

Caterpillar, Inc. – Mapleton Foundry is located at 8826 West Route 24 in Mapleton. The source is an iron foundry producing primarily cylinder blocks, heads and liners. The arc and induction furnaces located in the melting area melt scrap for use on the various mold lines. Sand cores are produced using resin systems. These cores form the voids inside a casting when molten iron is poured around them.

## 2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

| | |
|---|---|
| Act | Illinois Environmental Protection Act [415 ILCS 5/1 et seq.] |
| AP-42 | Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711 |
| Btu | British thermal unit |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] |
| CAAPP | Clean Air Act Permit Program |
| CAM | Compliance Assurance Monitoring |
| CERP | Casting Emission Reduction Program |
| CFR | Code of Federal Regulations |
| ERMS | Emissions Reduction Market System |
| HAP | Hazardous Air Pollutant |
| hr | hour |
| IAC | Illinois Administrative Code |
| I.D. No. | Identification Number of Source, assigned by Illinois EPA |
| ILCS | Illinois Compiled Statutes |
| Illinois EPA | Illinois Environmental Protection Agency |
| kW | kilowatts |
| lb | pound |
| mmBtu | Million British thermal units |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| $NO_x$ | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| PM | Particulate Matter |
| $PM_{10}$ | Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods |
| ppm | parts per million |
| PSD | Prevention of Significant Deterioration |
| RMP | Risk Management Plan |
| $SO_2$ | Sulfur Dioxide |
| T1 | Title I – identifies Title I conditions that have been carried over from an existing permit |
| T1N | Title I New – identifies Title I conditions that are being established in this permit |
| T1R | Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit |
| USEPA | United States Environmental Protection Agency |
| VOM | Volatile Organic Material |

## 3.0 INSIGNIFICANT ACTIVITIES

### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

- Pallet Brushes
- Centrifugal Cast Machine
- $SO_2/N_2$ Blending System
- Gas-Fired Stress Relief Furnace
- Gas-Fired Torches
- Slag Bin
- Sand Receiving
- Holding Furnaces
- Mold Machines
- Flask Elevator/Rollovers
- Sprue Drills
- Vacuum/Blowout Stations
- Core Setting
- $CO_2$ Blast Rooms/Portable $CO_2$ Blast
- Woodworking Equipment/Baghouses
- Plastic Preparation
- Transfer of Dust/Sand from Finishing Mullors
- Small Kewanee Boilers
- Casting Qualifiers
- Makeup Air Units
- Isocure Resin Storage Tanks

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

- Sand Bins
- Cold Box Release Agency
- Macor Feed Hopper
- Core Blow-Off Booth
- Core Vent Hole Drilling Stations
- Use of Core Paste and Molding Core Paste
- Shell Extruder Core Cut Off Devices
- Core Assembly/Core Set Stations
- Apron Conveyor with Manmate
- Silicon Carbide Silos
- Refractory Mixers and Storage Hopper
- Robotic Dryers

Molding Silos
Use of Pattern Cleaners
Electric Oven
Sanitary and AAO/Sanitary Treatment Processes
Body Feed Addition
Use of Hot Melt Adhesive
Use of Glue Sticks
Use/Mixing of Water-Based Core Dips
Waste Sand Handling
Miscellaneous Metal Working Tools
Sulfuric Acid Storage Tanks
Electric Stress Relief Furnaces

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Furnaces used for melting metals, other than beryllium, with a brim full capacity of less than 450 cubic inches by volume [35 IAC 201.210(a)(6)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all

coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

## 4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| F5 | Scrap Handling/Delivery | 1978 | None |
| 1 | Charge Makeup Stations (Arc) | 1978 | Dust Collector A37309 |
| 3 | Furnace Charging (Arc) | 1978 | Dust Collectors A37309 and A35069 |
| 5 | Arc Furnace Operation M65005 | 1978 | Dust Collector A35069 |
| 7 | Arc Furnace Operation M65824 | 1981 | Dust Collector A37309 |
| F10 | Duplexing | 1978 | None |
| 9 | Induction Furnace M65007 | 1978 | Dust Collector A37348 |
| 11 | Induction Furnace M65010 | 1978 | Dust Collector A37348 |
| 13 | Induction Furnace M66958 | 2001 | Dust Collector A37309 |
| 15 | Ladle Slagging Station M66629 | 1997 | None |
| F15 | Ladle Transfer | 1978 | None |
| 20 | Phenolic Urethane Continuous Mixer M66544 Part I and II Resins | 1996 | None |
| 21 | Phenolic Urethane Continuous Mixer M66545 Part I and II Resins | 1996 | None |
| 22 | Phenolic Urethane Continuous Mixer M66003 Part I and II Resins | 1987 | None |
| 25 | Phenolic Hotbox Batch Mixer M66546 Resin, Catalyst, Core Oil | 1988 | None |
| 27 | Epoxy/$SO_2$ Continuous Mixer M66536 Part I and II Resins | 1996 | None |
| 28 | Epoxy/$SO_2$ Continuous Mixer M66500 Part I and II Resins | 1994 | None |
| 30 | Epoxy/$SO_2$ Batch Mixer M66400 Part I and II Resins | 1996 | None |
| 33 | Phenolic Urethane Core Machines Part I and II Resins | 1998 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 46 | Core Machines (All) Triethylamine Use | 1982 | 2 Triethylamine Scrubbers |
| F20 | Phenolic Urethane Core Transport/Storage | 1998 | None |
| 51 | Phenolic Hotbox Core Machines | 1982 | None |
| F25 | Phenolic Hotbox Core Transport/Storage | 1982 | None |
| 67 | Epoxy/$SO_2$ Core Machines | 1997 | 2 $SO_2$ Scrubbers |
| F30 | Epoxy/$SO_2$ Core Transport/Storage | 1997 | None |
| 90 | Shell Extruder Core Machine M61657 | 1973 | None |
| 95 | 3406 Core Drying Oven M66053 | 1989 | None |
| 96 | 3300 Core Drying Oven M66164 | 1991 | None |
| 97 | Department 402 Block Core Drying Oven M65224 | 1978 | None |
| 100 | Miscellaneous Core Drying Oven M65617 | 1978 | None |
| 98 | 3100 Cell Microwave Drying Oven M66741 | 1998 | None |
| 99 | 3500 Cell Microwave Drying Oven M66731 | 1998 | None |
| 109 | Triethylamine Storage Tank (8,000 Gallon) P27004 | 1998 | None |
| 112 | Triethylamine Receiving Tank | 1999 | 2 Triethylamine Scrubbers |
| 113 | Sand Distribution System | 1978 | Dust Collector |
| 170 | Sand Transport/Bins | 1998 | Dust Collector |
| 171 | Phenolic Urethane Continuous Mixer M66696 | 1998 | None |
| 172 | Phenolic Urethane Continuous Mixer M66697 | 1998 | None |
| 173 | Phenolic Urethane Continuous Mixer M66698 | 1998 | None |
| 174 | Phenolic Urethane Continuous Mixer M66699 | 1998 | None |
| 175 | Phenolic Urethane Continuous Mixer/Batch Mixer M66700 | 1998 | None |
| 176 | Phenolic Urethane Continuous Mixer M66701 | 1998 | None |
| 177 | Phenolic Urethane Core Machine M66656 Part I and II Resins | 1998 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 178 | Phenolic Urethane Core Machine M66657 Part I and II Resins | 1998 | None |
| 179 | Phenolic Urethane Core Machine M66667 Part I and II Resins | 1998 | None |
| 180 | Phenolic Urethane Core Machine M66670 Part I and II Resins | 1998 | None |
| 181 | Core Machines (All) Triethylamine Use | 1998 | 2 Triethylamine Scrubbers |
| F35 | Phenolic Urethane Core Transport/Storage | 1998 | None |
| 190 | Microwave Drying Oven M66720 | 1998 | None |
| | **Mold Line 1** | | |
| 475 | Mold Spray Application | 3/1977 | Wet Dust Collector |
| 480 | Mold Pouring | 3/1977 | None |
| 485 | Mold Cooling | 3/1977 | None |
| 490 | Cope/Drag Separation Area | 3/1977 | Wet Dust Collector |
| 495 | Mold Shakeout | 3/1977 | Wet Dust Collector and 2 Dry Dust Collectors |
| 500 | Return/Makeup Sand System | 3/1977 | Wet Dust Collector |
| | **Mold Line 2** | | |
| 525 | Mold Pouring | 3/1977 | None |
| 530 | Mold Cooling | 3/1977 | None |
| 535 | Cope/Drag Separation Area | 3/1977 | Wet Dust Collector |
| 540 | Mold Shakeout | 3/1977 | Wet Dust Collector |
| 545 | Return/Makeup Sand System | 3/1977 | Wet Dust Collector |
| | **Mold Line 4** | | |
| 570 | Mold Pouring | 1981 | None |
| 575 | Mold Cooling | 1981 | None |
| 580 | Cope/Drag Separation Area | 1981 | Wet Dust Collector |
| 585 | Mold Shakeout | 1981 | Wet Dust Collector |
| 590 | Return/Make-up Sand System | 1981 | 2 Wet Dust Collectors and 1 Dust Collector |
| | **General Molding** | | |
| 625 | Pattern Spray Application | 4/1977 | Wet Dust Collector |
| 635 | Storage Silo - Fireclay | 4/1977 | Baghouse |
| 640 | Transport Hopper | 4/1977 | Baghouse |
| 250 | Sand Distribution System | 1981 | Dust Collector |
| 254 | Continuous Mixer | 1981 | None |
| 256 | Continuous Mixer | 1981 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 258 | Core Machine | 1981 | None |
| 260 | Core Machine (Double Station) | 1981 | None |
| 262 | Core Machines (All) TEA Use Triethylamine to Scrubber | 1981 | Triethylamine Scrubber |
| 266 | Core Drying Oven | 1997 | None |
| F40 | Phenolic Urethane Core Transportation and Storage | 1981 | None |
| 273 | Mold Pouring | 1987 | None |
| 275 | Mold Cooling | 1987 | Baghouse |
| 278 | Casting Removal/Bucket Dump | 1987 | Baghouse |
| 280 | Casting Degating/Decoring | 1987 | Baghouse |
| 290 | Waste Sand and Metallics Return System | 1987 | Baghouse |
| 294 | 3500 Blast | 1983 | Dust Collector |
| 298 | 3500 Stress Relief Oven | 1968 | None |
| 305 | Continuous Mixer (Stationary) M61985 | 1975 | None |
| 310 | Core Dipping | 1975 | None |
| 315 | Core Drying Oven (Electric) M61899 | 1975 | None |
| 325 | Continuous Mixer (Mobile) M65961 | 1986 | None |
| F45 | Backing Sand Transport/Storage | 1975 | None |
| F50 | Mold Pouring/Cooling | 1987 | None |
| F55 | 3600 Area Casting Lift-Out/Defining | 1987 | None |
| F60 | 3600 Area Waste Sand Handling | 1987 | None |
| 335 | 3600 Blast/Shot Separator M65949 | 1986 | 2 Dust Collectors |
| 410 | Continuous Mixer (Camshaft) M61758 | 1974 | None |
| 415 | Continuous Mixer (Mfg. Dev.) M65879 | 1981 | None |
| 418 | Compaction Rollover M61741 | 1974 | None |
| F65 | Core Transport/Storage | 1974 | None |
| 422 | Mold Spray Station | 1987 | None |
| 430 | Induction Furnace (Camshaft) M66007 | 1987 | None |
| 433 | Induction Furnace (Camshaft) M66508 | 1995 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 436 | Induction Furnace, Dual Body M66742 | 2000 | None |
| 439 | Induction Furnace (Spare) M66008 | 1987 | None |
| 442 | Magnesium Treatment | 1986 | None |
| 445 | Mold Pouring/Cooling | 1974 | None |
| 450 | Shakeout and Knockoff M65179 | 1974 | Dust Collector |
| 455 | Rotoblast M61851 | 1975 | Dust Collector |
| 700 | L1 Block Pickoff/Bucket Dump | 4/1977 | Baghouse |
| 703 | L1 Rough Blast | 4/1977 | Baghouse |
| 706 | L1 Robot Grinder | 4/1977 | Baghouse |
| 709 | L1 Robot Grinder | 1987 | Baghouse |
| 712 | L2 Head Dump/Shakeout | 4/1977 | Baghouse |
| 715 | L2 Canadian Grinder | 4/1977 | Baghouse |
| 718 | L2 Canadian Grinder | 4/1977 | Baghouse |
| 721 | L2 Axi-Flow Blast/Shot Recirculation System | 4/1977 | Baghouse |
| 724 | Sand/Dust Handling System | 4/1977 | Baghouse |
| 727 | Finishing Pit Operations | 4/1977 | Baghouse |
| 730 | Shot Reclaim System | 1993 | Baghouse |
| 733 | L1 BMD Blast/Shot Recirculation System | 1988 | Cartridge Collector |
| 736 | Liner Delivery System | 1996 | Baghouse |
| 739 | Liner Blast/Shot Recirculation System | 1986 | Baghouse |
| 742 | L4 Sand/Metallics Handling System | 1991 | Baghouse |
| 745 | Maus Fettling Machine | 1999 | Baghouse |
| 748 | L1 Finish Blast/Shot Recirculation System | 1977 | Baghouse |
| 751 | L2 BMD Blast/Shot Recirculation System | 1993 | Cartridge Collector |
| 754 | BMD Head/Block Finish Blast | 1999 | Baghouse |
| 757 | Rework Booth | 2000 | Baghouse |
| 760 | Casting Cooling | 1977 | None |
| 763 | Nozzle Blast | 2001 | Dust Collector |
| 801 | Primary Magnesium Treatment Station | 2001 | Baghouse |
| 802 | Secondary and Tertiary Magnesium Treatment Stations | 2001 | None |
| 840 | Gasoline Storage Tank | 1991 | None |
| 850 | Emergency Generator | 2000 | 17.70 mmBtu/hr |
| 851 | Emergency Generator | 1984 | 8.87 mmBtu/hr |
| 852 | Emergency Generator | 1977 | 8.51 mmBtu/hr |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 853 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 854 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 855 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 856 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 857 | Emergency Generator | 1982 | 8.51 mmBtu/hr |
| 858 | Emergency Generator | 1982 | 8.51 mmBtu/hr |
| 859 | Emergency Generator | 1995 | 8.30 mmBtu/hr |
| 860 | Emergency Generator | 1977 | 8.51 mmBtu/hr |

Fugitive Points:

1) Paved Roads

2) Waste Sand/Dust Transport

3) Sand Landfill

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of particulate matter, VOM, nitrogen oxides, and HAP emissions.

### 5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Fugitive Particulate Matter Operating Program

a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.2.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

c. This stationary source will be subject to 40 CFR Part 63, Subpart EEEEE, Iron and Steel Foundries when such rule becomes final and effective. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required under a final and effective rule.

5.2.7 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.9 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

N/A

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

## 5.5 Source-Wide Emission Limitations

### 5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

| Pollutant | Tons/Year |
|---|---|
| Volatile Organic Material (VOM) | 700.30 |
| Sulfur Dioxide ($SO_2$) | 37.30 |
| Particulate Matter (PM) | 758.23 |
| Nitrogen Oxides ($NO_x$) | 253.23 |
| HAP, not included in VOM or PM | ----- |
| Total | 1,749.06 |

### 5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

### 5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

## 5.6 General Recordkeeping Requirements

### 5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit, including HAP emissions.

5.6.2 Records for Operating Scenarios

N/A

5.6.3 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, including HAP emissions.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

## 5.9 General Compliance Procedures

### 5.9.1 General Procedures for Calculating VARIABLE Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of this permit, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

# 7.0 UNIT SPECIFIC CONDITIONS

## 7.1 Melting Area

### 7.1.1 Description

The arc and induction furnaces in the melting area melt scrap for use on the various mold lines. Scrap melted in the arc furnaces is duplexed (transferred and further processed) in the induction furnaces.

### 7.1.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| F5 | Scrap Handling/Delivery | None |
| 1 | Charge Makeup Stations (Arc) | Dust Collector A37309 |
| 3 | Furnace Charging (Arc) | Dust Collectors A37309 and A35069 |
| 5 | Arc Furnace Operation M65005 | Dust Collector A35069 |
| 7 | Arc Furnace Operation M65824 | Dust Collector A37309 |
| F10 | Duplexing | None |
| 9 | Induction Furnace M65007 | Dust Collector A37348 |
| 11 | Induction Furnace M65010 | Dust Collector A37348 |
| 13 | Induction Furnace M66958 | Dust Collector A37309 |
| 15 | Ladle Slagging Station M66629 | None |
| F15 | Ladle Transfer | None |

### 7.1.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit-specific conditions, are the emission units listed in Condition 7.1.2.

b. For electric arc furnaces the total particulate emissions from melt down and refining, charging, tapping, slagging, electrode port leakage and ladle lancing shall not exceed the allowable emission rate specified by 35 IAC 212.321. [35 IAC 212.448]

c. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

B. For process weight rates greater than or equal to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 11.42 | 24.8 |
| B | 0.16 | 0.16 |

d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in

35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitations of 35 IAC Part 218, Subpart G shall only apply to photochemically reactive material. [35 IAC 215.301]

e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

f. Pursuant to 35 IAC 201.149, the Permittee may continue operation of the 3 induction furnaces and arc furnace M65824 during a malfunction or breakdown with particulate matter emissions in excess of the above limit as necessary to prevent injury to person or severe damage to equipment, provided that the Permittee takes reasonable measures to prevent such events and minimize excess emissions. For example: The furnaces and associated control systems are properly maintained and operation of the furnaces is only continued to allow the furnaces to be emptied of molten metal.

7.1.4 Non-Applicability of Regulations of Concern

This permit is issued based on affected emission units not being subject to the National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production, 40 CFR 63, Subpart XXX, because ferromanganese and silicon manganese alloys are not being produced.

7.1.5 Control Requirements

The Permittee shall operate and maintain the dust collectors in a manner that assures compliance with the conditions of this section.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. Annual pour weight of induction furnace M66958 shall not exceed 150,000 tons/year. Compliance with this limitation shall be determined from a running total of 12 months of data.

b. Emissions from induction furnace M66958 shall not exceed the following limits:

| Pollutant | (Tons/Month | (Tons/Year) |
|---|---|---|
| | | |
| PM | 0.82 | 8.2 |
| $PM_{10}$ | 0.74 | 7.4 |
| CO | 7.05 | 70.5 |
| $NO_x$ | 1.73 | 17.3 |
| VOM | 2.4 | 24.0 |
| $SO_2$ | 0.08 | 0.8 |
| Lead | 0.036 | 0.36 |

These limits are based on the production limits and information supplied in the permit application.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

The above limitations were established in Permit 00080072, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.1.7 Testing Requirements

The Illinois EPA or USEPA may require the Permittee to test a furnace, along with its capture and control system, at such reasonable times as may be specified by the Illinois EPA or USEPA and at the expense of the Permittee. All such tests shall be made by or conducted under the direction of a person qualified by training and/or experience in the field of air pollution testing. [35 IAC 201.282(a)]

a. Upon request by the Illinois EPA or USEPA, the Permittee shall measure the emissions in the effluent stream of the exhaust from a furnace for the pollutant(s) specified in the request. The following methods and procedures shall be used for the testing, unless another method is approved by the Illinois EPA or USEPA: Refer to 40 CFR 60, Appendix A for USEPA test methods for all pollutants except $PM_{10}$ which is in 40 CFR 51, Appendix M.

| | |
|---|---|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| PM | USEPA Method 5 or 5D |
| $PM_{10}$* | USEPA Method 201 or 201A |
| $NO_x$ | USEPA Method 7 |
| Opacity | USEPA Method 9 |
| CO | USEPA Method 10 |
| Lead | USEPA Method 12 |
| VOM | USEPA Method 18 or 25 |

* $PM_{10}$ may be measured by using Method 5 if assuming that all of the PM measured is $PM_{10}$.

b. The Illinois EPA and USEPA may have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA or USEPA, the Permittee shall provide, without charge to the Illinois EPA or USEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary. [35 IAC 201.282(b)]

7.1.8 Monitoring Requirements

a. The Permittee shall perform monthly operational inspections of the equipment that is important to the performance of the capture systems (i.e., pressure sensors, dampers, and damper switches) for the furnaces. This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

b. Notwithstanding the above if an affected furnace is not operated at any time during a month, the above inspections need not be performed for the furnace provided however that such inspections shall be conducted as part of the resumption of operation of the furnace.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the Conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput, (tons/month and tons/year);

b. Records of operational inspections as required by Condition 7.1.8;

c. Emissions in tons/month and tons/year; and

d. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:

i. Date and duration of malfunction or breakdown;

ii. A full and detailed explanation of the cause for such emissions;

iii. The contaminants emitted and an estimate of the quantity of emissions;

iv. The measures used to reduce the quantity of emissions and the duration of the occurrence; and

v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

a. Compliance with the emission limitations of Conditions 7.1.3(b) and (c) is addressed by the control requirements of Condition7.1.5, testing in accordance with Condition 7.1.7 monitoring in accordance with Condition 7.1.8 and the recordkeeping required by Condition 7.1.9.

b. To determine compliance with the emission limitations of Condition 5.5.1 and 7.1.6 the emissions shall be calculated by using the following emission factors:

| Pollutant | Emission Unit | Uncontrolled Emission Factors (Lb/Ton of Gray Iron Produced) | Basis |
|---|---|---|---|
| PM | Arc Furnaces | 12.7 | AP-42 |
| $PM_{10}$ | | 11.4 | AP-42 |
| $NO_x$ | | 0.3 | AP-42 |
| VOM | | 0.15 | AP-42 |
| CO | | 0.93 | Engineering Estimate |
| PM | Induction Furnaces | 0.9 | AP-42 |
| $PM_{10}$ | | 0.62 | AP-42 |
| Lead | | 0.03 | Engineering Estimate |
| $NO_x$ | | 0.23 | Engineering Estimate |
| VOM | | 0.32 | Engineering Estimate |
| CO | | 0.94 | Engineering Estimate |
| PM | Scrap Handling/ Delivery | 0.02 | Engineering Estimate |
| PM | Charge Makeup Stations (Arc) | 0.02 | Engineering Estimate |
| PM | Furnace Charging (Arc) | 0.6 | AP-42 |
| PM | Duplexing and Ladle Transfer | 0.06 | Engineering Estimate |
| PM | Ladle Slagging Station | 0.01 | Engineering Estimate |

The above AP-42 emission factors are from Iron Foundries, Tables 12.10-3, 12.10-4, 12.10-5, 12.10-7 and 12.10-8, AP-42, May 2003.

Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Iron Produced (Tons) x (1 – Overall Control Efficiency)

## 7.2 Core Room

### 7.2.1 Description

The core room produces sand cores for use in the molding process. These cores form the voids inside a casting when molten iron is poured around them. These cores are manufactured using three primary resin systems: Phenolic urethane, phenolic hotbox and $SO_2$ (acrylic/epoxy/$SO_2$). All of the machine numbers are not listed in Condition 7.2.2.

### 7.2.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 20 | Phenolic Urethane Continuous Mixer M66544 Part I and II Resins | None |
| 21 | Phenolic Urethane Continuous Mixer M66545 Part I and II Resins | None |
| 22 | Phenolic Urethane Continuous Mixer M66003 Part I and II Resins | None |
| 25 | Phenolic Hotbox Batch Mixer M66546 Resin, Catalyst, Core Oil | None |
| 27 | Epoxy/$SO_2$ Continuous Mixer M66536 Part I and II Resins | None |
| 28 | Epoxy/$SO_2$ Continuous Mixer M66500 Part I and II Resins | None |
| 30 | Epoxy/$SO_2$ Batch Mixer M66400 Part I and II Resins | None |
| 33 | Phenolic Urethane Core Machines Part I and II Resins | None |
| 46 | Core Machines (All) Triethylamine Use | 2 Triethylamine Scrubbers |
| F20 | Phenolic Urethane Core Transport/Storage | None |
| 51 | Phenolic Hotbox Core Machines | None |
| F25 | Phenolic Hotbox Core Transport/Storage | None |
| 67 | Epoxy/$SO_2$ Core Machines | 2 $SO_2$ Scrubbers |

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| F30 | Epoxy/$SO_2$ Core Transport/Storage | None |
| 90 | Shell Extruder Core Machine M61657 | None |
| 95 | 3406 Core Drying Oven M66053 | None |
| 96 | 3300 Core Drying Oven M66164 | None |
| 97 | Department 402 Block Core Drying Oven M65224 | None |
| 100 | Miscellaneous Core Drying Oven M65617 | None |
| 98 | 3100 Cell Microwave Drying Oven M66741 | None |
| 99 | 3500 Cell Microwave Drying Oven M66731 | None |
| 109 | Triethylamine Storage Tank (8,000 Gallon) P27004 | None |
| 112 | Triethylamine Receiving Tank | 2 Triethylamine Scrubbers |
| 113 | Sand Distribution System | Dust Collector |

7.2.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are the emission units listed in Condition 7.2.2.

b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from an affected emission unit. [35 IAC 218.301] If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

c. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified

in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

B. For process weight rates greater than or equal to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 11.42 | 24.8 |
| B | 0.16 | 0.16 |

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

e. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or submerged fill, unless such tank is a pressure tank or is fitted with a recovery system. [35 IAC 215.122] Exception: If no odor nuisance exists there limitations shall only apply to the loading of volatile organic liquid with vapor pressure of 2.5 psia or greater at 70°F.

7.2.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected emission units not being subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart OOO, Manufacture of Amino/Phenolic Resins and 40 CFR 63, Subpart W, Polymers and Resins II because this source is not manufacturing amino/phenolic resins or epoxy resins.

7.2.5 Operational and Production Limits and Work Practices

The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. Emissions and operation of the core machine M65188 shall not exceed the following limits:

| Pollutant | Processing Rate (Tons/Hr) | Emission Rate (Lb/Ton) | Emissions (Lb/Mo) | Emissions (Ton/Yr) |
|---|---|---|---|---|
| PM | 1.2 | 0.30 | 0.30 | 1.58 |

These limits are based on maximum hours of operation (8,760 hours per year) and are based on using engineering estimate factor of 0.30 lb/ton.

The above limitations were established in Permit 98120046, pursuant to 40 CR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevent of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

b. i. Operation of core machine M66740 shall not exceed the following limits:

Mixed Sand Throughput: 8,049 Tons/Month
96,579 Tons/Year

ii. Emissions from core machine M66740 shall not exceed the following limits:

| PM Emissions | | $PM_{10}$ Emissions | | VOM Emissions | |
|---|---|---|---|---|---|
| (T/Mo) | (T/Yr) | (T/Mo) | (T/Yr) | (T/Mo) | (T/Yr) |
| 1.21 | 14.50 | 0.31 | 3.64 | 1.25 | 14.97 |

Compliance with annual limits shall be determined on a monthly basis plus the preceding 11 months (running 12 month total).

The above limitations were established in Permit 99100038, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

c. i. This permit is issued based upon negligible emissions of particulate matter and sulfur dioxide from the 24 SO2 core machines (i.e., M65948, M66048, M61619, M61744, M61817, M65731, M65732, M65734, M65735, M61745, M65187, M66115, M65191, M65215, M65249, M65708, M65733, M61690, ... etc.) with SO2 emission scrubbers and one core oven (M65053). For this purpose emissions of each contaminant from each source shall not exceed nominal rates of 0.1 lb/hr and 0.44 ton per year.

ii. This permit is based upon negligible emissions of particulate matter from the 2 hotbox core machines M60391 and M60392 and one core oven (M66164). For this purpose emissions from each source shall not exceed nominal rates of 0.1 lb/hr and 0.44 ton/year.

The above limitations were established in Permit 7890029, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year);

b. Emissions in tons/month and tons/year; and

c. Total natural gas usage ($ft^3$/year).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions from the affected emission units in excess of the emission limits specified in Conditions 7.2.6 and 5.5, within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as define in 35 IAC 201.102:

a. Convert any existing core machine from one primary resin system (phenolic urethane, phenolic hotbox, acrylic/spoxy/$SO_2$) to any other primary resin system if the following conditions are met:

i. The conversion will not violate a permit limit requested by this application;

ii. The conversion will not subject the core machine to any new applicable rule; and

iii. Conversion to phenolic urethane or acrylic/spoxy/$SO_2$ will be accompanied by control of TEA or $SO_2$ emissions respectively by an associated gas scrubber.

b. Each core drying oven is allowed to process cores made from any or all three of the primary resin systems noted above.

7.2.12 Compliance Procedures

a. Emissions shall be calculated by using the following emission factors:

| Pollutant | Emission Unit | Uncontrolled Emission Factors* (Lb/Ton of Throughput) |
|---|---|---|
| PM | Mixers | 0.3 Lb/Ton of Sand |
| VOM | Phenolic Urethane Mixers and Phenolic Urethane Core Machines | 17.89 Lb/Ton of Resin |
| VOM | Phenolic Hotbox Mixer and Phenolic Hotbox Core Machines | 2.7 Lb/Ton of Resin |
| VOM | Epoxy/$SO_2$ Mixers and Epoxy/$SO_2$ Core Machines | 6.79 Lb/Ton of Resin |
| VOM | Phenolic Urethane Core Transport/Storage | 35.77 Lb/Ton of Resin |

| Pollutant | Emission Unit | Uncontrolled Emission Factors* (Lb/Ton of Throughput) |
|---|---|---|
| VOM | Core Machines | 20 Lb/Ton of Triethylamine (After Scrubber) |
| VOM | Epoxy/$SO_2$ Core Transport/Storage | 13.57 Lb/Ton of Resin |
| VOM | `Shell Extruder Core Machines | 0.32 Lb/Ton of Resin |
| PM | Core Drying Ovens | 0.19 Lb/Ton of Sand |
| VOM | 3406 Drying Oven | 47.7 Lb/Ton of Phenolic Urethane Resin<br>7.2 Lb/Ton of Phenolic Hotbox Resin<br>18.10 Lb/Ton of Epoxy/$SO_2$ Resin |
| VOM | Microwave Drying Ovens | 2.8 Lb/Ton of Resin |
| PM | Sand Distribution System | 0.01 Lb/Ton of Sand (After Dust Collector) |
| $SO_2$ | Epoxy/$SO_2$ Core Machines | 20 Lb/Ton of $SO_2$ (After Scrubber) |

* Except where noted.

Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput

Emission factors are engineering estimates provided by the source.

b. Fuel combustion emissions may be calculated based on the following:

| Pollutant | Natural Gas Emission Factors for Boilers (Lb/$10^6$ $Ft^3$) |
|---|---|
| $NO_x$ | 100 |
| PM | 7.6 |
| $SO_2$ | 0.6 |
| VOM | 5.5 |

These are the emission factors for uncontrolled natural gas combustion, Table 1.4-1 and 1.4-2, AP-42, Volume I, Supplement F, March, 1998.

Emissions (Lb) = (Natural Gas Consumed, $Ft^3$) x (The Appropriate Emission Factor)

## 7.3 Block Core Complex

### 7.3.1 Description

The block core complex produces sand cores for use in the molding process. These cores form the voids inside a casting when molten iron is poured around them. The cores are manufactured using a phenolic urethane resin system.

### 7.3.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 170 | Sand Transport/Bins | Dust Collector |
| 171 | Phenolic Urethane Continuous Mixer M66696 | None |
| 172 | Phenolic Urethane Continuous Mixer M66697 | None |
| 173 | Phenolic Urethane Continuous Mixer M66698 | None |
| 174 | Phenolic Urethane Continuous Mixer M66699 | None |
| 175 | Phenolic Urethane Continuous Mixer/Batch Mixer M66700 | None |
| 176 | Phenolic Urethane Continuous Mixer M66701 | None |
| 177 | Phenolic Urethane Core Machine M66656 Part I and II Resins | None |
| 178 | Phenolic Urethane Core Machine M66657 Part I and II Resins | None |
| 179 | Phenolic Urethane Core Machine M66667 Part I and II Resins | None |
| 180 | Phenolic Urethane Core Machine M66670 Part I and II Resins | None |
| 181 | Core Machines (All) Triethylamine Use | 2 Triethylamine Scrubbers |
| F35 | Phenolic Urethane Core Transport/Storage | None |
| 190 | Microwave Drying Oven M66720 | None |

7.3.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are the emission units listed in Condition 7.3.2.

b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from an affected emission unit. [35 IAC 218.301] If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

c. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^{B}$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

B. For process weight rates greater than or equal to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 11.42 | 24.8 |
| B | 0.16 | 0.16 |

7.3.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected emission units not being subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart OOO, Manufacture of Amino/Phenolic Resins and 40 CFR 63, Subpart W, Polymers and Resins II, because this source is not manufacturing amino/phenolic resins or epoxy resins.

7.3.5 Operational and Production Limits and Work Practices

The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. Emissions and operation of equipment shall not exceed the following limits:

| Item of Equipment | Process Weight Rate (T/Hr) | Process Weight Rate (T/Yr) | Emission Factor PM (Lb/T) | Emission Factor $PM_{10}$ (Lb/T) | EMISSIONS PM (Lb/Hr) | EMISSIONS PM (T/Yr) | EMISSIONS $PM_{10}$ (T/Yr) |
|---|---|---|---|---|---|---|---|
| Sand Bins (1-4) | 41.4 | 98,522 | 0.65 | 0.54 | 0.13 | 0.2 | 0.1 |
| Mixers | 16.5[1] | 100,000 | -- | 0.08 | 29.70 | 0.44 | 0.44 |
| 4 Core Machines | 21[2] | 100,000 | 0.30 | 0.08 | 16.56 | 15.0 | 3.8 |
| Microwave Core Oven | 42 | 100,000 | -- | 0.05 | 7.98 | 0.44 | 0.44 |
| | | | | | Total: | 16.08 | 4.78 |

[1] Maximum per mixer

[2] Maximum per core machine

The limits of PM and $PM_{10}$ from the continuous mixers and from the core machines are based on 100,000 tons per year of mixed sand.

b. Emissions and operation of equipment shall not exceed the following limits:

| Item of Equipment | Parameter | Parameter Maximum Rate (T/Hr) | Parameter Maximum Rate (T/Yr) | Emission Factor VOM (Lb/T) | Emissions of VOM (Lb/Hr) | Emissions of VOM (T/Yr) |
|---|---|---|---|---|---|---|
| Mixers | Resin | 0.34[1] | 1,220 | 6.7 | 2.29 | 4.1 |
| 4 Core Machines | Resin | 0.44[2] | 1,220 | 6.7 | 2.91 | 4.1 |
| Core Machines (All) | Triethylamine | 0.62 | 89 | --- | --- | --- |
| TEA Scrubber | Triethylamine | 0.56 | 89 | 2,000 | 11.12 | 0.8 |
| Microwave | Resin | 0.87 | 1,220 | 2.8 | 2.43 | 1.7 |
| Fugitive Emissions Transport/Storage | Resin | 0.87 | 1,220 | 39.7 | 5.83 | 24.2 |
| | | | | Total VOM (T/Yr) | | 34.8 |

[1] Maximum per mixer

[2] Maximum per core machine

The emissions of volatile organic material (VOM) from the core machines are based on the annual rate of 1,220 tons per year of resin.

c. The above limitations were established in Permit 98030136, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items

for the affected emission units, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year); and

b. Emissions in tons/month and tons/year.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions from the affected emission units in excess of the emission limits specified in Conditions 7.3.6 and 5.5, within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

a. Emissions from the affected emission units may be calculated using the emission factors listed in Condition 7.3.6.

b. Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput x (1-Control Efficiency)

## 7.4 Mold Lines 1, 2 and 4

### 7.4.1 Description

Mold Lines 1, 2 and 4 use green sand and resin-bonded cores to produce engine components. Iron poured on these mold lines is melted in the arc or induction furnaces. Cores used on these mold lines are produced in the Core Room or purchased from outside vendors.

### 7.4.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| | **Mold Line 1** | |
| 475 | Mold Spray Application | Wet Dust Collector |
| 480 | Mold Pouring | None |
| 485 | Mold Cooling | None |
| 490 | Cope/Drag Separation Area | Wet Dust Collector |
| 495 | Mold Shakeout | Wet Dust Collector and 2 Dry Dust Collectors |
| 500 | Return/Makeup Sand System | Wet Dust Collector |
| | | |
| | **Mold Line 2** | |
| 525 | Mold Pouring | None |
| 530 | Mold Cooling | None |
| 535 | Cope/Drag Separation Area | Wet Dust Collector |
| 540 | Mold Shakeout | Wet Dust Collector |
| 545 | Return/Makeup Sand System | Wet Dust Collector |
| | | |
| | **Mold Line 4** | |
| 570 | Mold Pouring | None |
| 575 | Mold Cooling | None |
| 580 | Cope/Drag Separation Area | Wet Dust Collector |
| 585 | Mold Shakeout | Wet Dust Collector |
| 590 | Return/Make-up Sand System | 2 Wet Dust Collectors and 1 Dust Collector |
| | | |
| | **General Molding** | |
| 625 | Pattern Spray Application | Wet Dust Collector |
| 635 | Storage Silo - Fireclay | Baghouse |
| 640 | Transport Hopper | Baghouse |

7.4.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are the emission units listed in Condition 7.4.2.

b. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitations of 35 IAC 218, Subpart G shall only apply

to photochemically reactive material. [35 IAC 215.301]

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

7.4.4 Non-Applicability of Regulations of Concern

None

7.4.5 Operational and Production Limits and Work Practices

The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. Plant wide isopropyl alcohol usage and emissions shall not exceed 3 ton/month and 24 tons per year.

b. Plant wide mold release agent usage and emissions shall not exceed 0.53 ton/month and 4.75 tons per year.

c. Emissions of particulate matter (PM), nitrogen oxide ($NO_x$), sulfur dioxide ($SO_2$), and operation of equipment on Mold Lines No 1 and 2 shall not exceed the following limits:

| | Emission Factor (Lb/Ton) | (T/Mo) | (T/Yr) | (T/Mo) | (T/Yr) |
|---|---|---|---|---|---|
| Metal Poured | | 22,667 | 203,993 | | |
| PM | 0.04 | | | 0.46 | 4.1 |
| $SO_2$ | 0.02 | | | Neg. | Neg. |
| $NO_x$ | 0.01 | | | Neg. | Neg. |
| Mold Cooling (PM) | 1.41 | 22,667 | 203,993 | 16.00 | 143.8 |

These limits are based on the maximum hours of operation and the maximum process weight rate indicated in the application. Compliance with annual

limits shall be determined from a running total of 12 months of data.

The above limitations were established in Permit 78090031, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

d. Emissions and operation of equipment shall not exceed the following limits:

| Item of Equipment | Operating Hours (Hrs/Yr) | Process Rate (Tons/Hr) | Particulate Matter Emissions (Lb/Hr) | Particulate Matter Emissions (Tons/Yr) |
|---|---|---|---|---|
| Mold Line No. 4 | 5,880 | 155 | 2.63 | 7.7 |

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

The above limitations were established in Permit 85110021, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.4.7 Testing Requirements

The Illinois EPA or USEPA may require the Permittee to test the pouring and casting operations, along with its capture and control system, at such reasonable times as may be specified by the Illinois EPA or USEPA and at the expense of the Permittee. All such tests shall be made by or conducted under the direction of a person qualified by training and/or experience in the field of air pollution testing. [35 IAC 201.282(a)]

a. Upon request by the Illinois EPA or USEPA, the Permittee shall measure the emissions in the effluent stream of the exhaust from an affected pouring and casting operation for the pollutant(s) specified in the request. The following methods and procedures shall be used for the testing, unless another method is approved by the Illinois EPA or USEPA: Refer to 40 CFR 60, Appendix A for USEPA test methods for all pollutants except $PM_{10}$ which is in 40 CFR 51, Appendix M.

| | |
|---|---|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| PM | USEPA Method 5 of 5D |
| $PM_{10}$* | USEPA Method 201 or 201A |
| $NO_x$ | USEPA Method 7 |
| Opacity | USEPA Method 9 |
| CO | USEPA Method 10 |
| Lead | USEPA Method 12 |
| VOM | USEPA Method 18 or 25 |

* $PM_{10}$ may be measured by using Method 5 if assuming that all of the PM measured is $PM_{10}$.

b. The Illinois EPA and USEPA may have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA or USEPA, the Permittee shall provide, without charge to the Illinois EPA or USEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary. [35 IAC 201.282(b)]

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year); and

b. Emissions in tons/month and tons/year.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Emissions for the items listed below shall be calculated by using the following emission factors:

| Pollutant | Emission Unit | Uncontrolled Emission Factors (Lb/Ton) | Basis |
|---|---|---|---|
| PM and $PM_{10}$ | Mold Spray Application | 28.16 | Engineering Estimate |
| VOM | | 8.0 | Engineering Estimate |
| PM | Mold Pouring | 0.04 | CERP |
| $PM_{10}$ | | 0.02 | CERP |
| $SO_2$ | | 0.02 | CERP |
| $NO_x$ | | 0.01 | CERP |
| PM | Mold Cooling | 1.4 | Based on AP-42 |
| $PM_{10}$ | | 1.4 | Based on AP-42 |
| VOM | | 0.28 | Engineering Estimate |

The above AP-42 emission factors are from Iron Foundries, Tables 12.10-7 and 12.10-8, AP-42.

Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput x (1-Control Efficiency)

## 7.5 3500 Area

### 7.5.1 Description

The 3500 Area produces iron castings through the use of a phenolic urethane core making process. This area receives molten iron from the melt area furnaces.

### 7.5.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 250 | Sand Distribution System | Dust Collector |
| 254 | Continuous Mixer | None |
| 256 | Continuous Mixer | None |
| 258 | Core Machine | None |
| 260 | Core Machine (Double Station) | None |
| 262 | Core Machines (All) TEA Use Triethylamine to Scrubber | Triethylamine Scrubber |
| 266 | Core Drying Oven | None |
| F40 | Phenolic Urethane Core Transportation and Storage | None |
| 273 | Mold Pouring | None |
| 275 | Mold Cooling | Baghouse |
| 278 | Casting Removal/Bucket Dump | Baghouse |
| 280 | Casting Degating/Decoring | Baghouse |
| 290 | Waste Sand and Metallics Return System | Baghouse |
| 294 | 3500 Blast | Dust Collector |
| 298 | 3500 Stress Relief Oven | None |

### 7.5.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are the emission units listed in Condition 7.5.2.

b. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or

modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

ii. The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitations of 35 IAC 215, Subpart G shall only apply to photochemically reactive material. [35 IAC 215.301]

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

7.5.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected emission units not being subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart OOO, Manufacture of Amino/Phenolic Resins and 40 CFR 63, Subpart W, Polymers and Resins II because this source is not manufacturing amino/phenolic resins or epoxy resins.

7.5.5 Operational and Production Limits and Work Practices

The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. i. VOM emissions from the core drying oven are limited to 8 lb/hour and 25 tons per year.

ii. Particulate matter emissions from the core drying oven are limited to 5 lb/hour and 5.0 tons per year.

The above limitations were established in Permit 96040058, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.5.7 Testing Requirements

The Illinois EPA or USEPA may require the Permittee to test the pouring and cooling operations, at such reasonable times as may be specified by the Illinois EPA or USEPA and at the expense of the Permittee. All such tests shall be made by or conducted under the direction of a person qualified by training and/or experience in the field of air pollution testing. [35 IAC 201.282(a)]

a. Upon request by the Illinois EPA or USEPA, the Permittee shall measure the emissions in the effluent stream of the exhaust from an affected pouring and casting operation for the pollutant(s) specified in the request. The following methods and procedures shall be used for the testing, unless another method is approved by the Illinois EPA or USEPA: Refer to 40 CFR 60, Appendix A for USEPA test methods for all

pollutants except $PM_{10}$ which is in 40 CFR 51, Appendix M.

| | |
|---|---|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| PM | USEPA Method 5 of 5D |
| $PM_{10}$* | USEPA Method 201 or 201A |
| $NO_x$ | USEPA Method 7 |
| Opacity | USEPA Method 9 |
| CO | USEPA Method 10 |
| Lead | USEPA Method 12 |
| VOM | USEPA Method 18 or 25 |

* $PM_{10}$ may be measured by using Method 5 if assuming that all of the PM measured is $PM_{10}$.

b. The Illinois EPA and USEPA may have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA or USEPA, the Permittee shall provide, without charge to the Illinois EPA or USEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary. [35 IAC 201.282(b)]

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year);

b. Emissions in tons/month and tons/year; and

c. Total natural gas usage ($ft^3$/year).

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

a. Emissions for the items listed below shall be calculated by using the following emission factors:

| Pollutant | Emission Unit | Uncontrolled Emission Factors (Lb/Ton) | Basis |
|---|---|---|---|
| PM | Sand Distribution System | 3.6 | AP-42 |
| $PM_{10}$ | | 2.99 | Engineering Estimate |
| VOM | Continuous Mixers and Core Machines | 17.89 | Engineering Estimate |
| VOM | Core Machines | 20 (After Scrubber) | Engineering Estimate |
| VOM | Core Drying Oven | 47.7 | Engineering Estimate |
| VOM | Phenolic Urethane Core Transport/Storage | 3.72 | Engineering Estimate |
| PM | Mold Pouring | 0.04 | CERP |
| $PM_{10}$ | | 0.02 | CERP |
| $SO_2$ | | 0.02 | CERP |
| $NO_x$ | | 0.01 | CERP |
| VOM | | 0.14 | CERP |

Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput x (1-Control Efficiency)

b. Fuel combustion emissions may be calculated based on the following:

| Pollutant | Natural Gas Emission Factors for Boilers ($Lb/10^6$ $Ft^3$) |
|---|---|
| $NO_x$ | 100 |
| PM | 7.6 |
| $SO_2$ | 0.6 |
| VOM | 5.5 |

These are the emission factors for uncontrolled natural gas combustion, Table 1.4-1 and 1.4-2, AP-42, Volume I, Supplement F, March, 1998.

Emissions (Lb) = (Natural Gas Consumed, $Ft^3$) x (The Appropriate Emission Factor)

## 7.6 3600 Area

### 7.6.1 Description

The 3600 Area produces iron castings through the use of a "furan no-bake" core making process. This area receives molten iron from the melt area furnaces.

### 7.6.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 305 | Continuous Mixer (Stationary) M61985 | None |
| 310 | Core Dipping | None |
| 315 | Core Drying Oven (Electric) M61899 | None |
| 325 | Continuous Mixer (Mobile) M65961 | None |
| F45 | Backing Sand Transport/Storage | None |
| F50 | Mold Pouring/Cooling | None |
| F55 | 3600 Area Casting Lift-Out/Defining | None |
| F60 | 3600 Area Waste Sand Handling | None |
| 335 | 3600 Blast/Shot Separator M65949 | 2 Dust Collectors |

### 7.6.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are the emission units listed in Condition 7.6.2.

b. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the

allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

ii. The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitations of 35 IAC 215, Subpart G shall only apply to photochemically reactive material. [35 IAC 215.301]

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

7.6.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected emission units not being subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart OOO, Manufacture of Amino/Phenolic Resins and 40 CFR 63, Subpart W, Polymers and Resins II because this source is not manufacturing amino/phenolic resins or epoxy resins.

7.6.5 Operational and Production Limits and Work Practices

The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. This permit is issued based upon the following limitations on material throughput:

Operating Rates:

| Equipment | 3600 Area Operating Rates (Tons/Month) | (Tons/Year) |
|---|---|---|
| Metal Treatment | 500 | 4,000 |
| Mold Pouring/Cooling | 1,000 | 8,000 |
| Sand Throughput (2) | 1,222 | 11,000 |
| Continuous Mixer | 1,222 | 11,000 |
| Resin + Catalyst | 78 | 700 |
| Core Dipping | 25 | 150 |
| Core Drying Oven | 1,222 | 11,000 |
| Resin + Catalyst | 78 | 700 |

b. Emissions and operation of equipment shall not exceed the following limits:

Particulate Matter ($PM_{10}$):

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | (T/Yr) | $PM_{10}$ Maximum (Ton/Mo) (Uncontrolled) | (Ton/Yr) |
|---|---|---|---|---|---|
| Sand Bins (2) | 0.003 | 1,222 | 11,000 | 0.0018 | 0.01* |
| Continuous Mixer | 0.30 | 1,222 | 11,000 | 0.0165 | 1.37 |
| Core Dipping | ---- | ---- | ---- | | |
| Core Drying Oven | 0.19 | 1,222 | 11,000 | 0.1161 | 0.86 |
| Resin + Catalyst | ---- | ---- | ---- | | |
| Sand Bin | 1.9 E-04 | ---- | 8,760 | | 0.0 |
| Magnus Inoculation | 1.80 | 500 | 4,000 | 0.0002 | 0.72 |
| Pouring/Cooling | 1.80 | 1,000 | 8,000 | 0.0005 | 6.48 |
| | (Lb/Hr) | (Hr/Mo) | (Hr/Yr) | | |
| 3600 Blast | 120.34 | 125 | 1,000 | 0.0038* | 0.09* |
| Continuous Mixer-Mob. | 7.80 | 64 | 580 | 0.25 | 2.26 |
| Shot Separation | 17.14 | 125 | 1,000 | 0.011* | 0.086* |

* Controlled emission as indicated. All others uncontrolled. Emission factors used are worst case PM factors since $PM_{10}$ were unavailable.

Volatile Organic Material (VOM):

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | VOM (Ton/Mo)* | VOM (Ton/Yr)* |
|---|---|---|---|---|---|
| Mixer-Mobile + Continuous Resin + Catalyst | 12.0 | 78 | 700 | 0.47 | 4.20 |
| Core Dipping | 60.0 | 25 | 150 | 0.75 | 4.50 |
| Oven | 8.0 | 78 | 700 | 0.312 | 2.80 |
| Mold Pouring/Cooling | 0.52 | 1,000 | 8,000 | 0.26 | 2.08 |
| | | | | Subtotal: | 13.58 |

* Denotes change or new emission factor changes are included (both decreases and increases) to align previous data with the Title V application submitted February 26, 1996 as application number 96020004. Combined areas may reflect hours and PWR changes.

Mold Pouring:

Metal Poured (Combines Pouring and Cooling) Cooling is New.

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | Emissions (Ton/Mo) | Emissions (Ton/Yr) |
|---|---|---|---|---|---|
| Metal Poured | | 1,000 | 8,000 | | |
| $SO_2$ | 0.02 | | | Neg. | 0.08 |
| $NO_x$ | 0.01 | | | Neg. | 0.04 |
| VOM | 0.52 | | | 0.26 | 2.08 |
| CO | 4.97 | | | 2.485 | 19.88 |

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data. Neg. = Negligible emissions (e.g., emissions less than 0.1 pound per hour and 0.44 ton per year).

The above limitations were established in Permit 86070019, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a

new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.6.7 Testing Requirements

The Illinois EPA or USEPA may require the Permittee to test the pouring operation, at such reasonable times as may be specified by the Illinois EPA or USEPA and at the expense of the Permittee. All such tests shall be made by or conducted under the direction of a person qualified by training and/or experience in the field of air pollution testing. [35 IAC 201.282(a)]

a. Upon request by the Illinois EPA or USEPA, the Permittee shall measure the emissions in the effluent stream of the exhaust from an affected pouring and casting operation for the pollutant(s) specified in the request. The following methods and procedures shall be used for the testing, unless another method is approved by the Illinois EPA or USEPA: Refer to 40 CFR 60, Appendix A for USEPA test methods for all pollutants except $PM_{10}$ which is in 40 CFR 51, Appendix M.

| | |
|---|---|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| PM | USEPA Method 5 of 5D |
| $PM_{10}$* | USEPA Method 201 or 201A |
| $NO_x$ | USEPA Method 7 |
| Opacity | USEPA Method 9 |
| CO | USEPA Method 10 |
| Lead | USEPA Method 12 |
| VOM | USEPA Method 18 or 25 |

* $PM_{10}$ may be measured by using Method 5 if assuming that all of the PM measured is $PM_{10}$.

b. The Illinois EPA and USEPA may have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA or USEPA, the Permittee shall provide, without charge to the Illinois EPA or USEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary. [35 IAC 201.282(b)]

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year); and

b. Emissions in tons/month and tons/year.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

a. Emissions for the affected emission units may be calculated by using the emission factors listed in Condition 7.6.6.

b. Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput x (1-Control Efficiency)

## 7.7 Camshaft and Manufacturing Development Area

### 7.7.1 Description

The camshaft area produces gray, compacted graphite and ductile iron castings through use of a "phenolic urethane no bake" core making process. The manufacturing development area uses similar equipment and processes to make castings for research and development purposes. Each area contains its own set of induction furnaces for supplying molten iron.

### 7.7.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 410 | Continuous Mixer (Camshaft) M61758 | None |
| 415 | Continuous Mixer (Mfg. Dev.) M65879 | None |
| 418 | Compaction Rollover M61741 | None |
| F65 | Core Transport/Storage | None |
| 422 | Mold Spray Station | None |
| 430 | Induction Furnace (Camshaft) M66007 | None |
| 433 | Induction Furnace (Camshaft) M66508 | None |
| 436 | Induction Furnace, Dual Body M66742 | None |
| 439 | Induction Furnace (Spare) M66008 | None |
| 442 | Magnesium Treatment | None |
| 445 | Mold Pouring/Cooling | None |
| 450 | Shakeout and Knockoff M65179 | Dust Collector |
| 455 | Rotoblast M61851 | Dust Collector |

### 7.7.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are the emission units listed in Condition 7.7.2.

b. Each affected emission unit is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one

hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

ii. The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitations of 35 IAC 215, Subpart G shall only apply to photochemically reactive material. [35 IAC 215.301]

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

7.7.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected emission units not being subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart OOO, Manufacture of Amino/Phenolic Resins and 40 CFR 63,

Subpart W, Polymers and Resins II because this source is not manufacturing amino/phenolic resins or epoxy resins.

7.7.5 Operational and Production Limits and Work Practices

The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

a. This permit is issued based upon the following limitations on material throughput:

| | Camshaft Area | | Manufacturing Developmental Area | |
|---|---|---|---|---|
| | (T/Mo) | (T/Yr) | (T/Mo) | (T/Yr) |
| Metal Poured | 662 | 5,331 | 500 | 500 |
| Sand Throughput | 3,850 | 31,000 | 1,325 | 1,324 |
| Part I Resin | 42 | 341 | 12.3 | 12.3 |
| Part II Resin | 35 | 279 | 10.0 | 10.0 |
| Catalyst | 2.4 | 19.7 | 0.7 | 0.7 |

b. Plant wide isopropyl alcohol usage and emissions shall not exceed 3 ton/month and 24 tons per year.

c. Plant wide release agent usage and emissions shall not exceed 0.53 ton/month and 4.75 tons per year.

d. Emissions and operation of equipment shall not exceed the following limits:

Particulate Matter (PM):

| | Emission Factor | PWR | | PM | |
|---|---|---|---|---|---|
| | (Lb/Ton) | (T/Mo) | (T/Yr) | (T/Mo) | (T/Yr) |
| Sand Bins | 1.65 E-5 | 3,849 | 31,000 | 0.0 | 0.0 |
| Continuous Mixer | 0.30 | 3,849 | 31,000 | 0.58 | 4.65 |
| Vibrating Rollover | 0.3 | 3,849 | 31,000 | 0.58 | 4.65 |
| Magnesium Inoculation | 1.8 | 662 | 5,331 | 0.60 | 4.80 |
| Charge Handling | 0.6 | 662 | 5,331 | 0.20 | 1.60 |

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | PM (T/Mo) | PM (T/Yr) |
|---|---|---|---|---|---|
| Pouring/Cooling | 1.80 | 662 | 5,831 | 0.60 | 4.80 |
| Shakeout, Both Areas | 3.20 | 1,162 | 5,831 | 0.19 | 0.97* |
| Rotoblast, Both Areas | 0.60 | 1,162 | 5,831 | 0.03 | 0.17* |
| Chip/Grind Both Areas | 0.05 | 1,162 | 5,831 | 0.03 | 0.15 |

* Controlled emissions

Volatile Organic Material (VOM):

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | VOM (Ton/Mo)* | VOM (Ton/Yr)* |
|---|---|---|---|---|---|
| Continuous Mixer | | | | | |
| Part I Resin | 15.36 | 42 | 341 | 0.30 | 2.60 |
| Part II Resin | 17.76 | 35 | 279 | 0.30 | 2.50 |
| Catalyst | 38.4 | 2.4 | 20 | 0.05 | 0.38 |
| Core Transport/Storage | | | | | |
| Part I Resin | 30.08 | 42 | 341 | 0.63 | 5.13 |
| Part II Resin | 34.78 | 35 | 279 | 0.61 | 4.85 |
| Catalyst | 75.20 | 2.4 | 20 | 0.09 | 0.75 |
| Shakeout from Both Areas | 1.98 | 1,162 | 5,831 | 1.15 | 5.77 |

2 Induction Furnaces:

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | Emissions (Ton/Mo) | Emissions (Ton/Yr) |
|---|---|---|---|---|---|
| Metal Poured | | 662 | 5,331 | | |
| PM | 0.69 | | | 0.2 | 1.84 |
| $SO_2$ | 0.01 | | | Neg. | Neg. |
| $NO_x$ | 0.23 | | | 0.1 | 0.6 |
| VOM | 0.32 | | | 0.1 | 0.9 |
| CO | 0.94 | | | 0.3 | 2.5 |
| Lead | 0.04 | | | 0.03 | 0.1 |

Mold Pouring:

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | Emissions (Ton/Mo) | Emissions (Ton/Yr) |
|---|---|---|---|---|---|
| Metal Poured | | 662 | 5,331 | | |
| PM | 1.80 | | | 0.6 | 4.80 |
| $SO_2$ | 0.02 | | | Neg. | Neg. |
| $NO_x$ | 0.01 | | | Neg. | Neg. |
| VOM | 3.97 | | | 1.3 | 10.6 |
| CO | 2.44 | | | 0.8 | 6.5 |

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data. Neg. = Negligible emissions (e.g., emissions less than 0.1 pound per hour and 0.44 ton per year).

e. Emissions and operation of equipment in development area shall not exceed the following limits:

Particulate Matter:

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | PM (T/Mo) | PM (T/Yr) |
|---|---|---|---|---|---|
| Sand Bins | 0.65* | 1,325 | 1,324 | 0.43 | 0.43 |
| Continuous Mixer | 0.30* | 1,325 | 1,325 | 0.20 | 0.20 |
| Magnesium Inoculation* | 1.80* | 500 | 500 | 0.45 | 0.45 |
| Charge Handling | 0.60 | 500 | 500 | 0.15 | 0.15 |
| Induction Furnaces | 0.69 | 500 | 500 | 0.20 | 0.20 |
| Pouring/Cooling | 1.80 | 500 | 500 | 0.5 | 0.5 |

Mold Pouring:

| | Emission Factor (Lb/Ton) | PWR (T/Mo) | PWR (T/Yr) | Emissions (Ton/Mo) | Emissions (Ton/Yr) |
|---|---|---|---|---|---|
| Metal Poured | | 500 | 500 | | |
| PM | 1.80 | | | 0.7 | 0.7 |
| $SO_2$ | 0.02 | | | Neg. | Neg. |
| $NO_x$ | 0.01 | | | Neg. | Neg. |
| Resin Used | | 23 | 23 | | |
| VOM | 3.97 | | | 1.0 | 1.0 |

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data. Neg. – Negligible emissions (i.e., emissions less than 0.1 pound per hour and 0.44 ton per year)

f. This permit is issued based upon negligible emissions of volatile organic material from the development area continuous mixer (M65879). For this purpose emissions shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year.

g. The above limitations were established in Permit 85080035, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed

in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.7.7 Testing Requirements

The Illinois EPA or USEPA may require the Permittee to test the pouring and cooling operations, at such reasonable times as may be specified by the Illinois EPA or USEPA and at the expense of the Permittee. All such tests shall be made by or conducted under the direction of a person qualified by training and/or experience in the field of air pollution testing. [35 IAC 201.282(a)]

a. Upon request by the Illinois EPA or USEPA, the Permittee shall measure the emissions in the effluent stream of the exhaust from an affected pouring and casting operation for the pollutant(s) specified in the request. The following methods and procedures shall be used for the testing, unless another method is approved by the Illinois EPA or USEPA: Refer to 40 CFR 60, Appendix A for USEPA test methods for all pollutants except $PM_{10}$ which is in 40 CFR 51, Appendix M.

| | |
|---|---|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| PM | USEPA Method 5 of 5D |
| $PM_{10}$* | USEPA Method 201 or 201A |
| $NO_x$ | USEPA Method 7 |
| Opacity | USEPA Method 9 |
| CO | USEPA Method 10 |
| Lead | USEPA Method 12 |
| VOM | USEPA Method 18 or 25 |

* $PM_{10}$ may be measured by using Method 5 if assuming that all of the PM measured is $PM_{10}$.

b. The Illinois EPA and USEPA may have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA or USEPA, the Permittee shall provide, without charge to the Illinois EPA or USEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and

sensing devices, as may be necessary. [35 IAC 201.282(b)]

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year); and

b. Emissions in tons/month and tons/year.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

a. Emissions for the affected emission units may be calculated by using the emission factors listed in Condition 7.7.6.

b. Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput x (1-Control Efficiency)

## 7.8 Finishing Area

### 7.8.1 Description

The finishing area includes equipment/processes to remove sand from the castings and to prepare them for machining. These processes include but are not limited to blasting and grinding. Certain machining steps are also performed in this area.

### 7.8.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 700 | L1 Block Pickoff/Bucket Dump | Baghouse |
| 703 | L1 Rough Blast | Baghouse |
| 706 | L1 Robot Grinder | Baghouse |
| 709 | L1 Robot Grinder | Baghouse |
| 712 | L2 Head Dump/Shakeout | Baghouse |
| 715 | L2 Canadian Grinder | Baghouse |
| 718 | L2 Canadian Grinder | Baghouse |
| 721 | L2 Axi-Flow Blast/Shot Recirculation System | Baghouse |
| 724 | Sand/Dust Handling System | Baghouse |
| 727 | Finishing Pit Operations | Baghouse |
| 730 | Shot Reclaim System | Baghouse |
| 733 | L1 BMD Blast/Shot Recirculation System | Cartridge Collector |
| 736 | Liner Delivery System | Baghouse |
| 739 | Liner Blast/Shot Recirculation System | Baghouse |
| 742 | L4 Sand/Metallics Handling System | Baghouse |
| 745 | Maus Fettling Machine | Baghouse |
| 748 | L1 Finish Blast/Shot Recirculation System | Baghouse |
| 751 | L2 BMD Blast/Shot Recirculation System | Cartridge Collector |
| 754 | BMD Head/Block Finish Blast | Baghouse |
| 757 | Rework Booth | Baghouse |
| 760 | Casting Cooling | None |
| 763 | Nozzle Blast | Dust Collector |

7.8.3 Applicability Provisions and Applicable Regulations

a. The "affected emission units" for the purpose of these unit specific conditions, are listed in Condition 7.8.2.

b. The affected emission units are subject to the emission limits identified in Condition 5.2.2.

c. The emissions of particulate matter into the atmosphere in any one hour period from the affected emission units shall not exceed the allowable emission rates specified by the following equation [35 IAC 212.321]:

$$E = A\ (P)^{B}$$

Where:

P = Process weight rate

E = Allowable emission rate

1. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

2. For process weight rates in excess of 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 11.42 | 24.8 |
| B | 0.16 | 0.16 |

Where:

P = Process weight rate in metric or English tons per hour.

E = Allowable emission rate in kilograms or pounds per hour.

7.8.4 Non-Applicability of Regulations of Concern

Grinding, woodworking, sandblasting and shotblasting are not subject to Sections 35 IAC 212.321 and 212.322. [35 IAC 212.681]

7.8.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the air pollution control equipment including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.8.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected emission units are subject to the following:

N/A

7.8.7 Testing Requirements

N/A

7.8.8 Monitoring Requirements

N/A

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput (tons/month and tons/year); and

b. Emissions (tons/month and tons/year).

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected emission units with the permit requirements as follows,

pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

Emissions for the affected emission units may be calculated by using engineering estimates.

## 7.9 Magnesium Treatment Stations

### 7.9.1 Description

The primary treatment station will consist of a room in which a magnesium alloy is added to a ladle of molten iron to desulfurize the iron (through the formation of MgS) and/or increase the magnesium level in the base iron. The MgS is removed in the form of slag and a portion of the remaining magnesium comes off as a particulate emission – primary in the form of MgO. The room in which treatment will occur will be ventilated to an existing baghouse.

The secondary and tertiary treatment stations will be positioned in close proximity to individual mold lines. They will serve the same purpose as the primary station but with greater emphasis on controlling the final magnesium content in the treated iron. As a result, these stations will not use as much magnesium as the primary station, and hence the associated emissions will be lower. These stations will be vented through process exhausts near the mold pouring zones.

### 7.9.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 801 | Primary Magnesium Treatment Station | Baghouse |
| 802 | Secondary and Tertiary Magnesium Treatment Stations | None |

### 7.9.3 Applicability Provisions and Applicable Regulations

a. The "affected treatment stations" for the purpose of these unit specific conditions, are listed in Condition 7.9.2.

b. Each affected treatment station is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14,

1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

ii. The allowable emission rates of 35 IAC 212.321 may be calculated using the following:

$$E = A\ (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

A. For process weight rates up to 408 Mg/hr (450 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitations of 35 IAC 215, Subpart G shall only apply to photochemically reactive material. [35 IAC 215.301]

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

7.9.4 Non-Applicability of Regulations of Concern

None

7.9.5 Operational and Production Limits and Work Practices

a. Annual pour weight of the affected treatment stations shall not exceed 40,000 tons/year. Compliance with this limitation shall be determined from a running total of 12 months of data.

b. The maximum amount of iron subjected to secondary and tertiary magnesium treatment on an individual line shall not exceed 34.0 tons/hour.

c. The Permittee shall perform inspections on at least a monthly basis of the equipment that is important to the performance of the capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected treatment stations are subject to the following:

a. i. Particulate matter emissions from secondary and tertiary magnesium treatment of iron per ton of iron treated by the source shall not exceed 0.75 and0.50 lbs of particulate matter (PM) and particulate matter 10 ($PM_{10}$), respectively.

ii. Particulate emissions from the affected secondary and tertiary treatment stations shall not exceed the following limits:

| Pollutant | (Tons/Month) | (Tons/Year) |
|---|---|---|
| | | |
| PM | 1.67 | 15 |
| $PM_{10}$ | 1.11 | 10 |

These limits are based on the production limit in Condition 7.9.5 which reflects information supplied in the permit application, and the above emission factors.

b. i. This permit is based on negligible emissions of particulate matter associated with primary treatment of magnesium with iron, which is controlled by an existing baghouse. For this purpose, the increase in emissions is assumed to be no more than 0.44 tons per year.

ii. This permit is issued based on deminimis emissions of nitrogen oxides ($NO_x$) from magnesium treatment of iron. For this purpose the $NO_x$ emissions are assumed to be no more than 1.0 lb/hour and 4.4 tons/year.

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

d. The above limitations were established in Permit 01110018, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.9.7 Testing Requirements

a. The Illinois EPA or USEPA may require the Permittee to test the secondary and tertiary treatment stations, at such reasonable times as may be specified by the Illinois EPA or USEPA and at the expense of the Permittee. All such tests shall be made by or conducted under the direction of a person qualified by training and/or experience in the field of air pollution testing. [35 IAC 201.282)a)]

b. The following methods and procedures shall be used for testing or emissions. Refer to 40 CFR 60, Appendix A for USEPA test methods.

| | |
|---|---|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| Particulate Matter | USEPA Method 5 |
| Opacity | USEPA Method 9 |

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with the conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. i. The identify of each mold line on which magnesium treatment of iron is performed.

ii. For each line, the maximum amount of iron that would be subjected to magnesium treatment, considering the capacity of the line and the type and size casting currently being produced on the line with supporting documentation and calculations.

b. The Permittee shall maintain the following operating records:

i. Amount of iron produced (tons/month and tons/year).

ii. Amount of iron scheduled for magnesium treatment (tons/month and tons/year).

c. The Permittee shall keep an inspection maintenance log for the baghouse used to control the primary magnesium treatment operation.

d. The Permittee shall maintain the following records related to emissions:

i. Emissions of PM and $PM_{10}$ from secondary and tertiary treatment with supporting calculations in tons/month and tons/year.

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected treatment stations with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA of any record showing violation of an emission limitation within 30 days of such an occurrence.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.9.12 Compliance Procedures

a. Emissions for the affected treatment stations may be calculated by using the emission factors in Condition 7.9.6.

b. Emissions (Lb) = Emission Factor (Lb/Ton) x Tons of Throughput x (1-Control Efficiency)

## 7.10 Gasoline Storage Tank

### 7.10.1 Description

The gasoline storage tank is a 2,500 gallon tank used for fueling vehicles on-site. It is equipped with a submerged loading pipe and a vapor control device.

### 7.10.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 840 | Gasoline Storage Tank | None |

### 7.10.3 Applicability Provisions and Applicable Regulations

a. The gasoline storage tank is an "affected tank" for the purpose of these unit-specific conditions.

b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2) [35 IAC 215.122(b)].

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

d. Pursuant to 35 IAC 215.583(a), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:

i. The tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)]; and

ii. Pursuant to 35 IAC 215.583(a)(2), the vapors displaced from the storage tank during filling are processed by a vapor control system that includes the following:

The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 215.584(b) or (d) [35 IAC 215.583(a)(2)(C)].

7.10.4 Non-Applicability of Regulations of Concern

a. The affected tank is not subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank's capacity is below the applicability level.

b. The affected tank is not subject to the requirements of 35 IAC 215.123, Petroleum Liquid Storage Tanks, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 $m^3$.

7.10.5 Operational and Production Limits and Work Practices

a. The affected tank shall only be used for the storage of gasoline.

b. Pursuant to 35 IAC 215.583(c), each owner of a gasoline dispensing operation shall:

i. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system [35 IAC 215.583(c)(2)]; and

ii. Repair, replace or modify any worn out or malfunctioning component or element of design [35 IAC 215.583(c)(3)].

c. Pursuant to 35 IAC 215.583(d), each operator of a gasoline dispensing operation shall:

i. Maintain and operate each vapor control system in accordance with the owner's instructions [35 IAC 215.583(d)(1)];

ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system [35 IAC 215.583(d)(2)];

iii. Maintain gauges, meters or other specified testing devices in proper working order [35 IAC 215.583(d)(3)]; and

iv. Pursuant to 35 IAC 215.583(d)(4), operate the vapor collection system and delivery vessel unloading points in a manner that prevents:

A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B [35 IAC 215.583(d)(4)(A)]; and

B. Avoidable leaks of liquid during the filling of storage tanks [35 IAC 215.583(d)(4)(B)].

7.10.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.10.7 Testing Requirements

Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds a reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane). [35 IAC 215.583(d)(5)]

7.10.8 Monitoring Requirements

None

7.10.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with the Conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Records of the testing of the affected tank pursuant to Condition 7.10.7, which include the following [Section 39.5(7)(e) of the Act]:

i. The date, place and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

b. Design information for the tank showing the presence of a permanent submerged loading pipe;

c. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;

d. The throughput of the affected tank, gal/mo and gal/yr; and

e. The monthly and aggregate annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.10.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe

the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Any storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.10.3(b) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;

b. The storage of any VOL or VPL other than the material specified in Condition 7.10.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.10.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.10.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.10.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tank, the TANKS program is acceptable.

## 7.11 Emergency Generators

### 7.11.1 Description

Internal combustion engines are used for electric generation. The engines are fired with diesel fuel. The primary purpose will be to provide emergency power.

### 7.11.2 List of Emission Units

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| | | |
| 850 | Emergency Generator | 17.70 mmBtu/hr |
| 851 | Emergency Generator | 8.87 mmBtu/hr |
| 852 | Emergency Generator | 8.51 mmBtu/hr |
| 853 | Emergency Generator | 8.51 mmBtu/hr |
| 854 | Emergency Generator | 8.51 mmBtu/hr |
| 855 | Emergency Generator | 8.51 mmBtu/hr |
| 856 | Emergency Generator | 8.51 mmBtu/hr |
| 857 | Emergency Generator | 8.51 mmBtu/hr |
| 858 | Emergency Generator | 8.51 mmBtu/hr |
| 859 | Emergency Generator | 8.30 mmBtu/hr |
| 860 | Emergency Generator | 8.51 mmBtu/hr |

### 7.11.3 Applicability Provisions and Applicable Regulations

a. The “affected generators” for the purpose of these unit-specific conditions, are the generators as described in conditions 7.11.1 and 7.11.2.

b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm. [35 IAC 214.301]

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exception: If no odor nuisance exists, the limitation of 35 IAC Part 215, Subpart G, shall apply only to photochemically reactive material. [35 IAC 215.301]

### 7.11.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected generator not being subject to 35 IAC 212.321, Particulate Matter Emissions From Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972, because due to the unique nature of this

unit, a process weight rate weight cannot be set so that such rules cannot reasonably be applied.

7.11.5 Operational And Production Limits And Work Practices

a. Diesel fuel shall be the only fuel fired in the affected generators.

b. Operation of the affected generator 850 shall not exceed the following limits:

Diesel Fuel Consumption: 137.5 Gallons/Hour
Operating Hours: 200 Hours/Year

7.11.6 Emission Limitations

Emissions from the affected generator 850 shall not exceed the following limits:

| Pollutant | Emissions (Lb/Hr) | Emissions (Tons/Yr) |
|---|---|---|
| $NO_x$ | 67.02 | 6.70 |
| CO | 4.86 | 0.49 |
| PM | 0.63 | 0.06 |
| $SO_2$ | 0.86 | 0.09 |
| VOM | 0.92 | 0.09 |

These limits are based on the maximum diesel fuel consumption, the maximum hours of operation, and stack test emission data.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

The above limitations were established in Permit 99100080, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

7.11.7 Operating Requirements

None

7.11.8 Inspection Requirements

None

7.11.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected generator to demonstrate compliance with Condition 7.11.6:

a. Hours of operation (hours/year); and

b. Monthly and annual aggregate $NO_x$, CO, VOM, $SO_2$ and PM emissions, based on diesel fuel consumption.

7.11.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected generator with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

$NO_x$, CO, PM, $SO_2$ and VOM emissions from the affected generator in excess of the emission limits specified in Condition 7.11.6 or 5.5.1.

7.11.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.11.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.11.9 and the emission factors and formulas listed below:

a. Compliance with the emission limits in Conditions 7.11.3(b) and (c) is assumed to be achieved under inherent operating conditions of an affected generator, so that no compliance procedures are set in this permit addressing these requirements.

b. Emission Factors:

| Pollutant | Emission Unit | Uncontrolled Emission Factors (Lb/Hr) |
|---|---|---|
| $NO_x$ | Generator 850 | 67.02 |
| PM | | 0.63 |
| $SO_2$ | | 0.86 |
| VOM | | 0.92 |

| | | |
|---|---|---|
| $NO_x$ | Other Generators | 28.38 |
| PM | | 0.62 |
| $SO_2$ | | 4.48 |
| VOM | | 0.80 |

Factors were provided by the source.

Emissions = Operating Hours x Emission Factor

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after **_____{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms

without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions,

methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

| Monitoring Period | Report Due Date |
|---|---|
| January - June | September 1 |
| July - December | March 1 |

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

# 9.0 STANDARD PERMIT CONDITIONS

## 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

## 9.2 General Obligations of Permittee

### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or

resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

# 10.0 ATTACHMENTS

## 10.1 Attachment 1 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.2 Attachment 2 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of

minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;

- Applications requesting a relaxation of reporting or recordkeeping requirements; and

- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or

- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

| **Application For Construction Permit (For CAAPP Sources Only)** | **For Illinois EPA use only** |
|---|---|
| | I.D. number: |
| | Permit number: |
| | Date received: |

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

## Source Information

| | | |
|---|---|---|
| 1. Source name: | | |
| 2. Source street address: | | |
| 3. City: | | 4. Zip code: |
| 5. Is the source located within city limits? | | ☐ Yes ☐ No |
| 6. Township name: | 7. County: | 8. ID number: |

## Owner Information

| | | |
|---|---|---|
| 9. Name: | | |
| 10. Address: | | |
| 11. City: | 12. State: | 13. Zip code: |

## Operator Information (if different from owner)

| | | |
|---|---|---|
| 14. Name | | |
| 15. Address: | | |
| 16. City: | 17. State: | 18. Zip code: |

## Applicant Information

| | |
|---|---|
| 19. Who is the applicant? ☐ Owner ☐ Operator | 20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source |
| 21. Attention name and/or title for written correspondence: | |
| 22. Technical contact person for application: | 23. Contact person's telephone number: |

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

| Summary Of Application Contents | | |
|---|---|---|
| 24. | Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:<br>a) Non-attainment New Source Review – 35 IAC Part 203;<br>b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21;<br>c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63? | ☐ Yes ☐ No |
| 25. | Does the application identify and address all applicable emissions standards, including those found in the following:<br>a) Board Emission Standards – 35 IAC Chapter I, Subtitle B;<br>b) Federal New Source Performance Standards – 40 CFR Part 60;<br>c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63? | ☐ Yes ☐ No |
| 26. | Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought? | ☐ Yes ☐ No |
| 27. | Does the application include a complete process description for the emission units and control equipment for which a permit is being sought? | ☐ Yes ☐ No |
| 28. | Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA?<br>Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information. | ☐ Yes ☐ No |
| 29. | If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations? | ☐ Yes ☐ No<br>☐ Not Applicable, No TRADE SECRET information in this application |

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

| Signature Block | |
|---|---|
| | This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. |
| 30. | I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.<br>Authorized Signature:<br>BY:<br>_____ AUTHORIZED SIGNATURE<br>_____ TITLE OF SIGNATORY<br>_____ TYPED OR PRINTED NAME OF SIGNATORY<br>_____ / _____ / _____ DATE |

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.4 Attachment 4 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.

3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.

4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.

5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

6. Information addressing any outstanding transfer agreement pursuant to the ERMS.

7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked

yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.

9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

DWH:jar

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

Caterpillar, Inc. – Mapleton Foundry is located at 8826 West Route 24 in Mapleton. The source is an iron foundry producing primarily cylinder blocks, heads and liners. The arc and induction furnaces located in the melting area melt scrap for use on the various mold lines. Sand cores are produced using resin systems. These cores form the voids inside a casting when molten iron is poured around them.

II. EMISSION UNITS

Significant emission units at this source are as follows:

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| F5 | Scrap Handling/Delivery | 1978 | None |
| 1 | Charge Makeup Stations (Arc) | 1978 | Dust Collector A37309 |
| 3 | Furnace Charging (Arc) | 1978 | Dust Collectors A37309 and A35069 |
| 5 | Arc Furnace Operation M65005 | 1978 | Dust Collector A35069 |
| 7 | Arc Furnace Operation M65824 | 1981 | Dust Collector A37309 |
| F10 | Duplexing | 1978 | None |
| 9 | Induction Furnace M65007 | 1978 | Dust Collector A37348 |
| 11 | Induction Furnace M65010 | 1978 | Dust Collector A37348 |
| 13 | Induction Furnace M66958 | 2001 | Dust Collector A37309 |
| 15 | Ladle Slagging Station M66629 | 1997 | None |
| F15 | Ladle Transfer | 1978 | None |
| 20 | Phenolic Urethane Continuous Mixer M66544 Part I and II Resins | 1996 | None |
| 21 | Phenolic Urethane Continuous Mixer M66545 Part I and II Resins | 1996 | None |
| 22 | Phenolic Urethane Continuous Mixer M66003 Part I and II Resins | 1987 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 25 | Phenolic Hotbox Batch Mixer M66546 Resin, Catalyst, Core Oil | 1988 | None |
| 27 | Epoxy/$SO_2$ Continuous Mixer M66536 Part I and II Resins | 1996 | None |
| 28 | Epoxy/$SO_2$ Continuous Mixer M66500 Part I and II Resins | 1994 | None |
| 30 | Epoxy/$SO_2$ Batch Mixer M66400 Part I and II Resins | 1996 | None |
| 33 | Phenolic Urethane Core Machines Part I and II Resins | 1998 | None |
| 46 | Core Machines (All) Triethylamine Use | 1982 | 2 Triethylamine Scrubbers |
| F20 | Phenolic Urethane Core Transport/Storage | 1998 | None |
| 51 | Phenolic Hotbox Core Machines | 1982 | None |
| F25 | Phenolic Hotbox Core Transport/Storage | 1982 | None |
| 67 | Epoxy/$SO_2$ Core Machines | 1997 | 2 $SO_2$ Scrubbers |
| F30 | Epoxy/$SO_2$ Core Transport/Storage | 1997 | None |
| 90 | Shell Extruder Core Machine M61657 | 1973 | None |
| 95 | 3406 Core Drying Oven M66053 | 1989 | None |
| 96 | 3300 Core Drying Oven M66164 | 1991 | None |
| 97 | Department 402 Block Core Drying Oven M65224 | 1978 | None |
| 100 | Miscellaneous Core Drying Oven M65617 | 1978 | None |
| 98 | 3100 Cell Microwave Drying Oven M66741 | 1998 | None |
| 99 | 3500 Cell Microwave Drying Oven M66731 | 1998 | None |
| 109 | Triethylamine Storage Tank (8,000 Gallon) P27004 | 1998 | None |
| 112 | Triethylamine Receiving Tank | 1999 | 2 Triethylamine Scrubbers |
| 113 | Sand Distribution System | 1978 | Dust Collector |
| 170 | Sand Transport/Bins | 1998 | Dust Collector |
| 171 | Phenolic Urethane Continuous Mixer M66696 | 1998 | None |
| 172 | Phenolic Urethane Continuous Mixer M66697 | 1998 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 173 | Phenolic Urethane Continuous Mixer M66698 | 1998 | None |
| 174 | Phenolic Urethane Continuous Mixer M66699 | 1998 | None |
| 175 | Phenolic Urethane Continuous Mixer/Batch Mixer M66700 | 1998 | None |
| 176 | Phenolic Urethane Continuous Mixer M66701 | 1998 | None |
| 177 | Phenolic Urethane Core Machine M66656 Part I and II Resins | 1998 | None |
| 178 | Phenolic Urethane Core Machine M66657 Part I and II Resins | 1998 | None |
| 179 | Phenolic Urethane Core Machine M66667 Part I and II Resins | 1998 | None |
| 180 | Phenolic Urethane Core Machine M66670 Part I and II Resins | 1998 | None |
| 181 | Core Machines (All) Triethylamine Use | 1998 | 2 Triethylamine Scrubbers |
| F35 | Phenolic Urethane Core Transport/Storage | 1998 | None |
| 190 | Microwave Drying Oven M66720 | 1998 | None |
| | **Mold Line 1** | | |
| 475 | Mold Spray Application | 3/1977 | Wet Dust Collector |
| 480 | Mold Pouring | 3/1977 | None |
| 485 | Mold Cooling | 3/1977 | None |
| 490 | Cope/Drag Separation Area | 3/1977 | Wet Dust Collector |
| 495 | Mold Shakeout | 3/1977 | Wet Dust Collector and 2 Dry Dust Collectors |
| 500 | Return/Makeup Sand System | 3/1977 | Wet Dust Collector |
| | **Mold Line 2** | | |
| 525 | Mold Pouring | 3/1977 | None |
| 530 | Mold Cooling | 3/1977 | None |
| 535 | Cope/Drag Separation Area | 3/1977 | Wet Dust Collector |
| 540 | Mold Shakeout | 3/1977 | Wet Dust Collector |
| 545 | Return/Makeup Sand System | 3/1977 | Wet Dust Collector |
| | **Mold Line 4** | | |
| 570 | Mold Pouring | 1981 | None |
| 575 | Mold Cooling | 1981 | None |
| 580 | Cope/Drag Separation Area | 1981 | Wet Dust Collector |
| 585 | Mold Shakeout | 1981 | Wet Dust Collector |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 590 | Return/Make-up Sand System | 1981 | 2 Wet Dust Collectors and 1 Dust Collector |
| | **General Molding** | | |
| 625 | Pattern Spray Application | 4/1977 | Wet Dust Collector |
| 635 | Storage Silo - Fireclay | 4/1977 | Baghouse |
| 640 | Transport Hopper | 4/1977 | Baghouse |
| 250 | Sand Distribution System | 1981 | Dust Collector |
| 254 | Continuous Mixer | 1981 | None |
| 256 | Continuous Mixer | 1981 | None |
| 258 | Core Machine | 1981 | None |
| 260 | Core Machine (Double Station) | 1981 | None |
| 262 | Core Machines (All) TEA Use Triethylamine to Scrubber | 1981 | Triethylamine Scrubber |
| 266 | Core Drying Oven | 1997 | None |
| F40 | Phenolic Urethane Core Transportation and Storage | 1981 | None |
| 273 | Mold Pouring | 1987 | None |
| 275 | Mold Cooling | 1987 | Baghouse |
| 278 | Casting Removal/Bucket Dump | 1987 | Baghouse |
| 280 | Casting Degating/Decoring | 1987 | Baghouse |
| 290 | Waste Sand and Metallics Return System | 1987 | Baghouse |
| 294 | 3500 Blast | 1983 | Dust Collector |
| 298 | 3500 Stress Relief Oven | 1968 | None |
| 305 | Continuous Mixer (Stationary) M61985 | 1975 | None |
| 310 | Core Dipping | 1975 | None |
| 315 | Core Drying Oven (Electric) M61899 | 1975 | None |
| 325 | Continuous Mixer (Mobile) M65961 | 1986 | None |
| F45 | Backing Sand Transport/Storage | 1975 | None |
| F50 | Mold Pouring/Cooling | 1987 | None |
| F55 | 3600 Area Casting Lift-Out/Defining | 1987 | None |
| F60 | 3600 Area Waste Sand Handling | 1987 | None |
| 335 | 3600 Blast/Shot Separator M65949 | 1986 | 2 Dust Collectors |
| 410 | Continuous Mixer (Camshaft) M61758 | 1974 | None |
| 415 | Continuous Mixer (Mfg. Dev.) M65879 | 1981 | None |
| 418 | Compaction Rollover M61741 | 1974 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| F65 | Core Transport/Storage | 1974 | None |
| 422 | Mold Spray Station | 1987 | None |
| 430 | Induction Furnace (Camshaft) M66007 | 1987 | None |
| 433 | Induction Furnace (Camshaft) M66508 | 1995 | None |
| 436 | Induction Furnace, Dual Body M66742 | 2000 | None |
| 439 | Induction Furnace (Spare) M66008 | 1987 | None |
| 442 | Magnesium Treatment | 1986 | None |
| 445 | Mold Pouring/Cooling | 1974 | None |
| 450 | Shakeout and Knockoff M65179 | 1974 | Dust Collector |
| 455 | Rotoblast M61851 | 1975 | Dust Collector |
| 700 | L1 Block Pickoff/Bucket Dump | 4/1977 | Baghouse |
| 703 | L1 Rough Blast | 4/1977 | Baghouse |
| 706 | L1 Robot Grinder | 4/1977 | Baghouse |
| 709 | L1 Robot Grinder | 1987 | Baghouse |
| 712 | L2 Head Dump/Shakeout | 4/1977 | Baghouse |
| 715 | L2 Canadian Grinder | 4/1977 | Baghouse |
| 718 | L2 Canadian Grinder | 4/1977 | Baghouse |
| 721 | L2 Axi-Flow Blast/Shot Recirculation System | 4/1977 | Baghouse |
| 724 | Sand/Dust Handling System | 4/1977 | Baghouse |
| 727 | Finishing Pit Operations | 4/1977 | Baghouse |
| 730 | Shot Reclaim System | 1993 | Baghouse |
| 733 | L1 BMD Blast/Shot Recirculation System | 1988 | Cartridge Collector |
| 736 | Liner Delivery System | 1996 | Baghouse |
| 739 | Liner Blast/Shot Recirculation System | 1986 | Baghouse |
| 742 | L4 Sand/Metallics Handling System | 1991 | Baghouse |
| 745 | Maus Fettling Machine | 1999 | Baghouse |
| 748 | L1 Finish Blast/Shot Recirculation System | 1977 | Baghouse |
| 751 | L2 BMD Blast/Shot Recirculation System | 1993 | Cartridge Collector |
| 754 | BMD Head/Block Finish Blast | 1999 | Baghouse |
| 757 | Rework Booth | 2000 | Baghouse |
| 760 | Casting Cooling | 1977 | None |
| 763 | Nozzle Blast | 2001 | Dust Collector |
| 801 | Primary Magnesium Treatment Station | 2001 | Baghouse |
| 802 | Secondary and Tertiary Magnesium Treatment Stations | 2001 | None |
| 840 | Gasoline Storage Tank | 1991 | None |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---|---|---|---|
| | | | |
| 850 | Emergency Generator | 2000 | 17.70 mmBtu/hr |
| 851 | Emergency Generator | 1984 | 8.87 mmBtu/hr |
| 852 | Emergency Generator | 1977 | 8.51 mmBtu/hr |
| 853 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 854 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 855 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 856 | Emergency Generator | 1978 | 8.51 mmBtu/hr |
| 857 | Emergency Generator | 1982 | 8.51 mmBtu/hr |
| 858 | Emergency Generator | 1982 | 8.51 mmBtu/hr |
| 859 | Emergency Generator | 1995 | 8.30 mmBtu/hr |
| 860 | Emergency Generator | 1977 | 8.51 mmBtu/hr |

Fugitive Points:

1) Paved Roads

2) Waste Sand/Dust Transport

3) Sand Landfill

## III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

| Pollutant | Tons/Year |
|---|---|
| Volatile Organic Material (VOM) | 700.30 |
| Sulfur Dioxide ($SO_2$) | 37.30 |
| Particulate Matter (PM) | 758.23 |
| Nitrogen Oxides ($NO_x$) | 253.23 |
| HAP, not included in VOM or PM | ----- |
| Total | 1,749.06 |

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain

in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

DWH:96020004:psj